

We claim

1. A device for instant manufacture of customized paint, which comprises a container housing (1) at least two cans (2) for holding the ingredients useful for preparing the paint, each can being provided with an opening through which the cans are interconnected by means of a pipe (3), the pipe (3) being provided with valves (4) which operate on electronic signals for adjusting the flow of the said ingredients from the said cans (2), the pipe (5) being connected to a pump (6) for pumping the said ingredients from the said cans (2) into the paint container (7), the pump (6) being provided with a variable frequency drive (VFD) (8) for varying the flow rate of the quantities of the said ingredients from the said cans (2) to the container, the paint container (7) being removably placed on a weighing platform (9), for weighing the paint formed in the paint container (7), the weight being transmitted to a control system (10) to control the variable frequency drive (VFD) (8), pump (6) and valve (4), the control system (10), comprising an embedded controller having a LCD (liquid crystal display) (11) provided with a central processing unit (14), the output of weighing platform (9) being connected to the central processing unit (14), one terminal of the central processing unit being connected to the LCD (liquid crystal display) (11), second terminal of the central processing unit (14) being connected to a smart card (15), the third terminal of the central processing unit interacting with the memory (17), the fourth terminal of the central processing unit being connected to the input of the digital input/output device (16), the fifth terminal of the central processing unit being connected to membrane keyboard (12) for human interface, the output of the digital input/output device (16) being connected to a relay board (18), and the output of the relay board (18) being connected to the variable frequency drive (8) and to the valves (4).
2. A device as claimed in claim 1 wherein the container (1) is partly closed and is provided with doors at appropriate places.
3. A device as claimed in claim 2 wherein the bottom of the container (1) is provided with rollers (13) to facilitate easy installation of the cans inside the container.
4. A device as claimed in claim 3 wherein the device contains three cans (2) for holding the ingredients, each can (2), containing the following ingredients (i) filler base (ii) TiO₂ base and (iii) emulsion base.
5. A device as claimed in claim 4 wherein the filler base such as blends of extenders like talc, china clay, calcite, etc. is used.
6. A device as claimed in claim 4 wherein the TiO₂ base such as rutile titanium dioxide is used.
7. A device as claimed in claim 4 wherein the emulsion base, such as high binding acrylic emulsion polymer along with rheological modifiers are used.

8. A device as claimed in claims 1 wherein the openings in the cans (2) are at their top.
9. A device as claimed in claims 1 wherein the pipes (3) are made of PVC and pipes (5) made of stainless steel.
10. A device as claimed in claims 1 wherein the valves provided in the pipes are motorized valves.
- 5 11. A device as claimed in claims 1 wherein the pump used is a screw pump.
12. A device as claimed in claims 1 to 11 wherein the cans used to hold the ingredients are of suitable size such as 50 liters, 100 liters, 150 liters, 200 litres and the like based on the appropriate use of the device at the point of sale (retailer or stockist or depot).
- 10 13. A control system .(10) for use in a device as defined in claims 1 to 12 which comprises an embedded controller having a LCD (liquid crystal display) (11) provided with a central processing unit (14), the output of weighing platform (9) being connected to the central processing unit (14), one terminal of the central processing unit being connected to the LCD (liquid crystal display) (11), second terminal of the central processing unit (14) being connected to a smart card (15), the third terminal of the central processing unit interacting with the memory (17), the fourth terminal of the central processing unit being connected to the input of the digital input / output device (16), the fifth terminal of the central processing unit being connected to membrane keyboard (12) for human interface, the output of the digital input/output device (16) being connected to a relay board (18) and the output of the relay board (18) being connected to the variable frequency drive (8), and to the valves (4).
- 15 14. A control system for use in a device as claimed in claims 1 to 13 wherein the display device is an LCD (liquid crystal display) with 256 colour and a resolution of 640 x 480 TFT LCD pixels.
- 20 15. A control system as claimed in claims 13 to 14 wherein the keyboard interface used is a dust and water-resistant membrane keypad.